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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLI-

CATION OF

ZORICH, ET. AL.

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SERIAL NO.

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09/29/2000

: EXAMINER:

CHAUDHRY

FOR

MULTIPLE CONTENTS CONTAINER ASSEMBLY FOR

ULTRAPURE SOLVENT PURGING

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Commissioner for Patents P.O. BOX 1450 **ALEXANDRIA, VA 22313-1450**

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APPEAL BRIEF UNDER RULE 192

Further to the Notice of Appeal filed herewith after the Final Rejection in the Office Action of 26 April 2004 in which Claims 1, 5-19, 22, 28, 29, 33, 40 and 42-44 are pending in this case and Claims 1, 8-19, 22, 33, 40, and 42-44 were finally rejected under 35 USC 103(a), Applicant respectfully requests reversal of the Final Rejection and allowance of the claims.

REAL PARY IN INTEREST

The assignee of record, Air Products and Chemicals, Inc., is the real party in interest.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences to the present case and its appeal.

STATUS OF THE CLAIMS

Claims 1-44 were originally in the case. Claims 2-4, 20-21, 23-27, 30-32, 34-39 and 41 were cancelled. Claims 5-7, 28 and 29 have been allowed. The claims on appeal are Claims 1, 8-19, 22, 33, 40 and 42-44.

STATUS OF AMENDMENTS

An amendment has **not** been filed after the issuance of the Final Rejection in the Office Action of 26 April 2004. An amendment was filed after the issuance of the Non-Final Rejection in the Office Action of 22 September 2003. The amendments were entered in the case. An amendment was filed after the issuance of the Non-Final Rejection in the Office Action of 18 April 2003. The amendments were entered in the case.

SUMMARY OF THE INVENTION

The present invention is a high purity source chemical container assembly, comprising; a high purity source chemical container (10) having a main body with container walls, at least one inlet (26) to the interior of the source chemical container (10), at least one outlet (22) from the interior of the source chemical container (10), at least one source chemical solvent ampoule (48) attached directly to the main body container wall of the source chemical container (10), at least one inlet (50) to the interior of the source chemical solvent ampoule (48), at least one outlet (52) from the interior of the source chemical solvent ampoule (48), at least one solvent capture ampoule (56) attached directly to the main body container wall of the source chemical container (10) sized to accommodate source chemical solvent from said source chemical solvent ampoule (48), and at least one orifice (58) communicating with the interior of the solvent capture ampoule (56), such that the high purity source chemical container (10), the source chemical solvent ampoule (48) and the solvent capture ampoule (56) are combined together in to a single assembly suitable for shipping and replacing in one piece.

The present invention is also a process for using the above assembly.

ISSUES

Is the Section 103(a) rejection appropriate in light of the fact that the cited prior art of record applied in the rejection does suggest or render obvious the Present Claims' integral assembly of a primary product container, a solvent source container and a solvent capture container where the containers are affixed to one another by their container walls, affording ease of transportation and use and shipment integrity?

GROUPING OF CLAIMS

Claims 1, 8-15, 17-18, 22, 33, 40 and 42-44 are grouped together because the issues of patentability are common to all the claims.

Claims 16 and 19 appear to have no relevant prior art cited against them, so Applicant asserts that they are separately patentable.

Claims 5-7, 28 and 29 are grouped separately because they have been allowed, and are not the subject of this appeal.

ARGUMENTS

35 USC 103(a) Voloshin, et. al.

The independent claims 1, 22, 33, 42, 43 on appeal recite that the solvent ampoule and the solvent capture ampoule are attached directly to the main body container wall of the source chemical container. This is distinct from US 5,964,230 *Voloshin, et. al.*, which does not show any particular association of the solvent source ampoule, source chemical container or solvent capture ampoule, other than a flow path association. Applicant asserts that appealed independent claims 1, 22, 33, 42, 43 and their respective appealed dependent claims are therefore patentable over US 5,964,230.

Applicants respectfully disagree with the examiner's position that the structural arrangement of the apparatus of the present invention is not patentable over the cited prior art of record. The examiner has cited no prior art for the examiner's recognized deficiencies in the cited prior art that the examiner has relied upon.

The examiner has expressly admitted; "The reference fails to disclose that the high purity source container, the source chemical solvent ampoule and the solvent capture ampoule are combined together in to a single assembly suitable for shipping and replacing in one piece."

The examiner has cited *In re Japikse 86 USPQ 70 (CCPA 1950)* for the finding in that case that the mere "relocation" of a switch from one prior art location to another location was not "invention ... since the operation of the device would not thereby be modified." *Japikse* is not analogous to the present rejection, because in *Japikse* prior art WAS cited for the feature that was considered not inventive. Here in the present final rejection, there is NO prior art citation for the CLAIMED feature of the present invention at issue, but merely argumentative case law citations.

In addition, Applicant asserts that the present invention does "operate" in a different manner that *Voloshin, et. al.* because the present invention protects the solvent ampoules, makes the assembly more readily transportable and assures that fluid conduits, and more importantly, their connections, between the solvent vessels and the main container fluid lines remain intact for the high purity required by the electronics industry and required due to the reactivity and toxicity of typical electronics industry chemicals. The difference is as much as SAFE versus UNSAFE. Applicant asserts that is a significant difference, particularly when the prior art does not even suggest an EQUIVALENT, as commented upon below with regard to the next case the examiner has cited, rather than the examiner citing prior art.

The examiner has cited *In re Lindberg 93 USPQ 23 (CCPA 1952)* apparently without reading or understanding the holding in that case. That case's holding was to uphold the examiner's rejection that the "oil tank, pump and fluid motor" of *Lindberg* was the "full equivalent" of the "mechanical agitator drive means" of the cited reference of record *Brandt*, et. al. The court found "the substitution of a known type of hydraulic drive system for the mechanical agitator drive system of the primary reference patents to Bateman, et. al., and Brandt, et. al.," were equivalents and did not involve "invention".

Significant in this case was the fact that the examiner DID cite several references to support the fact that the *Lindberg* feature was in the prior art in the form of an EQUIVALENT. In contrast, in the present final rejection, the examiner merely cites language in *In re Lindberg*, RATHER than to cite prior art for the feature of the solvent containers being

ATTACHED TO THE MAIN BODY OF THE SOURCE CHEMICAL CONTAINER (per the claims on appeal).

In fact, the text cited by the examiner from *In re Lindberg* is DICTA regarding an argument advanced by Lindberg during appeal THAT WAS NOT SUPPORTED BY THE CLAIMS ON APPEAL. No stronger case of dicta could exist than that. The point being "portable" or "movable" had nothing to do with the decision in *In re Lindberg*, but was merely gratuitous dicta. In contrast, the limitations or features DO appear in the present Applicant's claims on appeal.

35 USC 103(a) Voloshin, et. al., in view of Cripe, et. al.

Applicant makes no separate arguments for dependent Claims 8-10 and 13, which depend from Claim 1 and have the patentable feature discussed immediately above. Independent Claims 33 and 42-43 and dependent Claim 44, separately recite the same feature as Claim 1 discussed above, which should render these claims patentable.

Claims 16 and 19 appear to be rejected by the examiner, but no basis for rejection appears to be of record. Applicant asserts the separate patentability of Claims 16 and 19 for their recitation of either an internally stored pressurized condition or vacuum condition without aid of outside sources of pressure or vacuum during operation. Both Voloshin, et. al. and Cripe, et. al. teach only external pressure and vacuum sources during operation

SUMMARY

The Present Invention is directed to a chemical container having integral solvent source container and solvent capture container affixed to a wall of the chemical container, which configuration provides an unexpected advantage of the Present Invention over the prior art, which advantage has gone unrecognized by such prior art and for which NO prior art has been cited of record.

In light of these remarks distinguishing the prior art, Applicant respectfully requests reconsideration, reversal and allowance of the Present Invention at the Board's earliest convenience

Applicant has separately authorized the appeal brief fee (\$310) authorized to the Deposit Account identified in the Form PTO SB/17 accompanying this Amendment.

This Appeal Brief is provided in triplicate as required under the rules.

Respectfully submitted,

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attachment:

Form PTO SB/17

Appendix

APPENDIX

Claims On Appeal

1. (previously amended) A high purity source chemical container assembly, comprising; a high purity source chemical container having a main body with container walls, at least one inlet to the interior of the source chemical container, at least one outlet from the interior of the source chemical container, at least one source chemical solvent ampoule attached directly to the main body container wall of the source chemical container, at least one inlet to the interior of the source chemical solvent ampoule, at least one outlet from the interior of the source chemical solvent ampoule, at least one solvent capture ampoule attached directly to the main body container wall of the source chemical container sized to accommodate source chemical solvent from said source chemical solvent ampoule, and at least one orifice communicating with the interior of the solvent capture ampoule, such that the high purity source chemical container, the source chemical solvent ampoule and the solvent capture ampoule are combined together in to a single assembly suitable for shipping and replacing in one piece.

Claims 2-4. (Canceled).

5. (previously presented; not on appeal; allowed) A high purity source chemical container assembly, comprising; a high purity source chemical container, at least one inlet to the interior of the source chemical container, at least one outlet from the interior of the source chemical container, at least one source chemical solvent ampoule integral to said assembly, at least one inlet to the interior of the source chemical solvent ampoule, at least one outlet from the interior of the source chemical solvent ampoule, at least one solvent capture ampoule integral to said assembly sized to accommodate source chemical solvent from said source chemical solvent ampoule, and at least one orifice communicating with the interior of

the solvent capture ampoule, wherein said assembly has a chime ring bracket on an exterior of said high purity source chemical container.

- 6. (Original; not on appeal; allowed) The assembly of Claim 5 wherein said source chemical solvent ampoule is integral to said chime ring bracket.
- 7. (Original; not on appeal; allowed) The assembly of Claim 5 wherein said solvent capture ampoule is integral to said chime ring bracket.
- 8. (Original) The assembly of Claim 1 wherein said high purity source chemical container has a diptube connected to said outlet and extending to a point adjacent a bottom of said high purity source chemical container.
- 9. (Original) The assembly of Claim 1 wherein said high purity source chemical container has a level sensor communicating with an exterior of said container and extending to a point adjacent a bottom of said high purity source chemical container.
- 10. (Original) The assembly of Claim 9 wherein said level sensor is selected from the group consisting of a float level sensor, an ultrasonic level sensor, a capacitance level sensor, an optical level sensor and combinations thereof.
- 11. (Original) The assembly of Claim 1 wherein said inlet and said outlet of said high purity source chemical container each have a valve for controlling flow of pressurizing fluid or high purity source chemical, respectively.

- 12. (Original) The assembly of Claim 11 wherein said valve is selected from the group consisting of a pneumatic valve, a solenoid valve, a manual valve and combinations thereof.
- 13. (Original) The assembly of Claim 1 wherein said source chemical solvent ampoule has a diptube connected to said outlet of said source chemical solvent ampoule and extending to a point adjacent a bottom of said source chemical solvent ampoule.
- 14. (Original) The assembly of Claim 1 wherein said inlet to said high purity source chemical container is connected to a source of pressurizing inert gas.
- 15. (Original) The assembly of Claim 1 wherein said inlet to said source chemical solvent ampoule is connected to a source of pressurizing inert gas.
- 16. (Original) The assembly of Claim 1 wherein said source chemical solvent ampoule contains a solvent under pressure without connection to an external source of pressure.
- 17. (Original) The assembly of Claim 1 wherein said solvent capture ampoule has two orifices.
- 18. (Original) The assembly of Claim 17 wherein one of said orifices of said solvent capture ampoule is connected to one of a low pressure vent or source of vacuum.
- 19. (Original) The assembly of Claim 1 wherein the interior of said solvent capture ampoule is under vacuum without connection to a source of vacuum.
- 20. (canceled)

21. (canceled)

- 22. (previously amended) A high purity source chemical container assembly, comprising; a high purity source chemical container having a main body with container walls, at least one inlet to the interior of the source chemical container, at least one outlet from the interior of the source chemical container, at least one source chemical solvent ampoule attached directly to the main body container wall, at least one inlet to the interior of the source chemical solvent ampoule, at least one outlet from the interior of the source chemical solvent ampoule, at least one solvent capture ampoule attached directly to the main body container wallsized to accommodate source chemical solvent from said source chemical solvent ampoule, and at least one orifice communicating with the interior of the solvent capture ampoule, and a sorbent media contained in the solvent capture ampoule, such that the high purity source chemical container, the source chemical solvent ampoule and the solvent capture ampoule are combined together in to a single assembly suitable for shipping and replacing in one piece.
- 23. (canceled)
- 24. (canceled)
- 25. (canceled)
- 26. (canceled)
- 27. (canceled)

- 28. (previously presented; not on appeal; allowed) A high purity source chemical container assembly, comprising; a high purity source chemical container, at least one inlet to the interior of the source chemical container, at least one outlet from the interior of the source chemical container, at least one source chemical solvent ampoule integral to said assembly, at least one inlet to the interior of the source chemical solvent ampoule, at least one outlet from the interior of the source chemical solvent ampoule, at least one solvent capture ampoule integral to said assembly sized to accommodate source chemical solvent from said source chemical solvent ampoule, and at least one orifice communicating with the interior of the solvent capture ampoule, wherein said high purity source chemical container has a baffle to define two chambers to contain two distinct high purity source chemicals wherein each chamber has at least one inlet to the interior of such chamber and at least one outlet from the interior of such chamber.
- 29. (Original; not on appeal; allowed) The assembly of Claim 28 wherein said high purity source chemical container chambers each have a level sensor communicating with an exterior of said chamber, respectively, and extending to a point adjacent a bottom of said chamber, respectively.
- 30. (canceled)
- 31. (canceled)
- 32. (canceled)

33. (previously amended) A high purity source chemical container assembly, comprising; a high purity source chemical container having a main body with container walls, an inlet to the interior of the source chemical container having an integral pneumatic valve for connection to a source of pressurizing inert gas, an outlet from the interior of the source chemical container having an integral pneumatic valve for connection to a manifold to deliver high purity source chemical to a downstream process using said chemical said outlet having a diptube extending to a point adjacent a bottom of said source chemical container, at least one source chemical solvent ampoule attached directly to the main body container wall of the source chemical container, an inlet to the interior of the source chemical solvent ampoule having an integral pneumatic valve for connection to a source of pressurizing inert gas, an outlet from the interior of the source chemical solvent ampoule having an integral pneumatic valve for connection to said manifold which delivers high purity source chemical to a downstream process, a solvent capture ampoule attached directly to the main body container wall of the source chemical container sized to accommodate source chemical solvent from said source chemical solvent ampoule, and an orifice communicating with the interior of the solvent capture ampoule to receive source chemical solvent from said source chemical solvent ampoule through said manifold, such that the high purity source chemical container, the source chemical solvent ampoule and the solvent capture ampoule are combined together in to a single assembly suitable for shipping and replacing in one piece.

- 34. (canceled)
- 35. (canceled)
- 36. (canceled)

- 37. (Canceled).
- 38. (canceled)
- 39. (canceled)
- 40. (Original) The assembly of Claim 1 wherein said solvent capture ampoule has at least two orifices comprising at least one inlet for solvent entry and at least on outlet to facilitate venting, each orifice having a valve for closing said orifices wherein said valve is selected from the group consisting of pneumatic, manual, electrical, hydraulic, solenoid and combinations thereof, a diptube that extends to near the bottom of the solvent capture ampoule and a level sense selected from the group consisting of floats, optical, capacitive, weight, thermal, or combinations thereof.

41. (canceled)

42. (previously amended) A high purity source chemical container assembly, comprising; a high purity source chemical container having a main body with container walls, an inlet to the interior of the source chemical container having an integral pneumatic valve for connection to a source of pressurizing inert gas, an outlet from the interior of the source chemical container having an integral pneumatic valve for connection to a manifold to deliver high purity source chemical to a downstream process using said chemical said outlet having a diptube extending to a point adjacent a bottom of said source chemical container, at least one source chemical solvent ampoule attached directly to the main body container wall of the source chemical container, an outlet from the interior of the source chemical solvent ampoule having an integral pneumatic valve for connection to said manifold which delivers high purity

source chemical to a downstream process, a solvent capture ampoule attached directly to the main body container wall of the source chemical container sized to accommodate source chemical solvent from said source chemical solvent ampoule, having an orifice communicating with the interior of the solvent capture ampoule to receive source chemical solvent from said source chemical solvent ampoule via said manifold, such that the high purity source chemical container, the source chemical solvent ampoule and the solvent capture ampoule are combined together in to a single assembly suitable for shipping and replacing in one piece.

43. (previously amended) A process for cleaning a manifold which delivers high purity source chemical from a high purity source chemical container assembly to a point of use wherein a high purity source chemical container, having a main body with container walls, having an inlet to the interior of the source chemical container having an integral pneumatic valve for connection to a source of pressurizing inert gas and an outlet from the interior of the source chemical container having an integral pneumatic valve for connection to said manifold to deliver high purity source chemical to a point of use wherein said outlet has a diptube extending to a point adjacent a bottom of said source chemical container, wherein after delivery of the source chemical to said manifold, the manifold is cleaned by delivering a source chemical solvent from a source chemical solvent ampoule attached directly to the main body container wall of the source chemical container to said manifold by pressurizing said source chemical solvent ampoule through an inlet to the interior of the source chemical solvent ampoule having an integral pneumatic valve for connection to a source of pressurizing inert gas to deliver said source chemical solvent to an outlet from the interior of the source chemical solvent ampoule having an integral pneumatic valve for connection to said manifold and collecting said solvent and any source chemical carried by said solvent from said manifold in a solvent capture ampoule attached directly to the main body container

wall of the source chemical container sized to accommodate source chemical solvent from said source chemical solvent ampoule through an orifice communicating with the interior of the solvent capture ampoule to receive source chemical solvent from said source chemical solvent ampoule.

44. (Original) The process of Claim 43 wherein the opening and closing of valves and transfer of source chemical and source chemical solvent is controlled by an automated control unit communicating with such valves.